

## **Biography**

### **J. Birkholzer**

Jens Birkholzer is a staff scientist in the Earth Sciences Division at Lawrence Berkeley National Laboratory (LBNL), where he currently serves as the Deputy Division Director and leads the Nuclear Energy & Waste Program. Jens received his Ph.D. in water resources, hydrology, and soil science from Aachen University of Technology in Germany in 1994. He joined LBNL in 1994 as geological scientist, left for a management position in his native Germany in 1999, and eventually returned to LBNL as a staff scientist in 2001. Dr. Birkholzer has over 300 scientific publications, about 90 of which are in peer-reviewed journals, in addition to numerous research reports. Jens' area of expertise is subsurface hydrology with emphasis on coupled fluid, gas, solute and heat transport in complex subsurface systems. His research is mostly in the context of modeling and data evaluation related to risk/performance assessment, e.g., for geologic disposal of radioactive wastes, for geologic CO<sub>2</sub> storage, and for environmental remediation. In the area of radioactive waste disposal, he has focused on understanding temperature-driven flow and transport processes within and near waste emplacement tunnels, via experiments and predictive modeling. In the area of CO<sub>2</sub> storage, Jens works on better understanding the potential environmental risks of geologic carbon sequestration to groundwater resources, for example by monitoring and modeling the potential water quality changes arising from leakage of CO<sub>2</sub> through fractures and faults into potable aquifers.